

AMENDMENTS TO THE CLAIMS

CLAIM 1 (CURRENTLY AMENDED) A bicycle electrical control apparatus comprising:
a first control unit that provides first electrical signals;
a second control unit that provides second electrical signals;
an electrical connecting cord having a first end coupled to the first control unit and a second end coupled to the second control unit for communicating the first electrical signals from the first control unit to the second control unit;

wherein the electrical connecting cord communicates the first electrical signals from the first control unit to the second control unit through a plurality of communication paths as a self-contained unit;

a first connecting terminal fastened to one of the communication paths at one of the first and second ends of the electrical connecting cord;

a second connecting terminal disposed on one of the first and second control units; and
wherein the first connecting terminal is detachably connected to the second connecting terminal such that the first connecting terminal normally is attached to and detached from the second connecting terminal independently of any other connecting terminals fastened to other ones of plurality of communication paths at the one of the first and second ends of the electrical connecting cord.

CLAIM 2 (ORIGINAL): The apparatus according to claim 1 wherein the first control unit is operated by power provided by a power supply mounted to the bicycle.

CLAIM 3 (ORIGINAL): The apparatus according to claim 1 wherein the first electrical signals comprise signals that correspond to a state of motion of the bicycle.

CLAIM 4 (ORIGINAL): The apparatus according to claim 3 wherein the state of motion of the bicycle is bicycle speed.

CLAIM 5 (ORIGINAL): The apparatus according to claim 4 wherein the first control unit receives pulses corresponding to bicycle speed and provides first electrical signals that correspond to bicycle speed from the pulses.

CLAIM 6 (ORIGINAL): The apparatus according to claim 5 wherein the pulses arise from an output of a dynamo.

CLAIM 7 (ORIGINAL): The apparatus according to claim 1 wherein the first electrical signals comprise power signals.

CLAIM 8 (ORIGINAL): The apparatus according to claim 7 wherein the second control unit is operated by the power signals.

CLAIM 9 (ORIGINAL): The apparatus according to claim 1 wherein the first electrical signals comprise control signals.

CLAIM 10 (ORIGINAL): The apparatus according to claim 9 wherein the second control unit is controlled by the control signals.

CLAIM 11 (ORIGINAL): The apparatus according to claim 1 wherein the second electrical signals comprise drive signals for driving a moving electrical component.

CLAIM 12 (ORIGINAL): The apparatus according to claim 11 wherein the second electrical signals comprise drive signals for moving a suspension component.

CLAIM 13 (ORIGINAL): The apparatus according to claim 11 wherein the second electrical signals comprise drive signals for moving a gear change component.

CLAIM 14 (ORIGINAL): The apparatus according to claim 1 wherein the second electrical signals comprise drive signals for driving an electrical display.

CLAIM 15 (ORIGINAL): The apparatus according to claim 1 wherein the first electrical signals comprise power signals and control signals.

CLAIM 16 (ORIGINAL): The apparatus according to claim 15 wherein the first electrical signals comprise a composite signal that contains the power signals and the control signals.

CLAIM 17 (ORIGINAL): The apparatus according to claim 1 wherein one of the first and second connecting terminals is structured to screw onto the other one of the first and second connecting terminals.

CLAIM 18 (ORIGINAL): The apparatus according to claim 17 wherein the one of the first and second connecting terminals comprises a Y-terminal.

CLAIM 19 (ORIGINAL): The apparatus according to claim 1 wherein one of the first and second connecting terminals comprises a male terminal, and wherein the other one of the first and second connecting terminals comprises a female terminal.

CLAIM 20 (ORIGINAL): The apparatus according to claim 19 wherein the first and second connecting terminals comprise FASTON terminals.

CLAIM 21 (ORIGINAL): The apparatus according to claim 1 wherein the first connecting terminal is crimped onto the one of the first and second ends of the electrical connecting cord.

CLAIM 22 (CURRENTLY AMENDED): The apparatus according to claim ~~1~~ 23 wherein the ~~first~~ third connecting terminal comprises one of a multi-terminal socket and a multi-terminal plug, and wherein the ~~second~~ fourth connecting terminal comprises the other one of the multi-terminal socket and the multi-terminal plug.

CLAIM 23 (CURRENTLY AMENDED): The apparatus according to claim ~~22~~ 1 further comprising:

a third connecting terminal fastened to the other one of the first and second ends of the electrical connecting cord; and

a fourth connecting terminal disposed on the other one of the first and second control units.

CLAIM 24 (ORIGINAL): The apparatus according to claim 23 wherein one of the third and fourth connecting terminals is structured to screw onto the other one of the third and fourth connecting terminals.

CLAIM 25 (ORIGINAL): The apparatus according to claim 23 wherein one of the third and fourth connecting terminals comprises a male terminal, and wherein the other one of the third and fourth connecting terminals comprises a female terminal.

CLAIM 26 (PREVIOUSLY PRESENTED): The apparatus according to claim 1 wherein the first connecting terminal is connected to an individual wire.